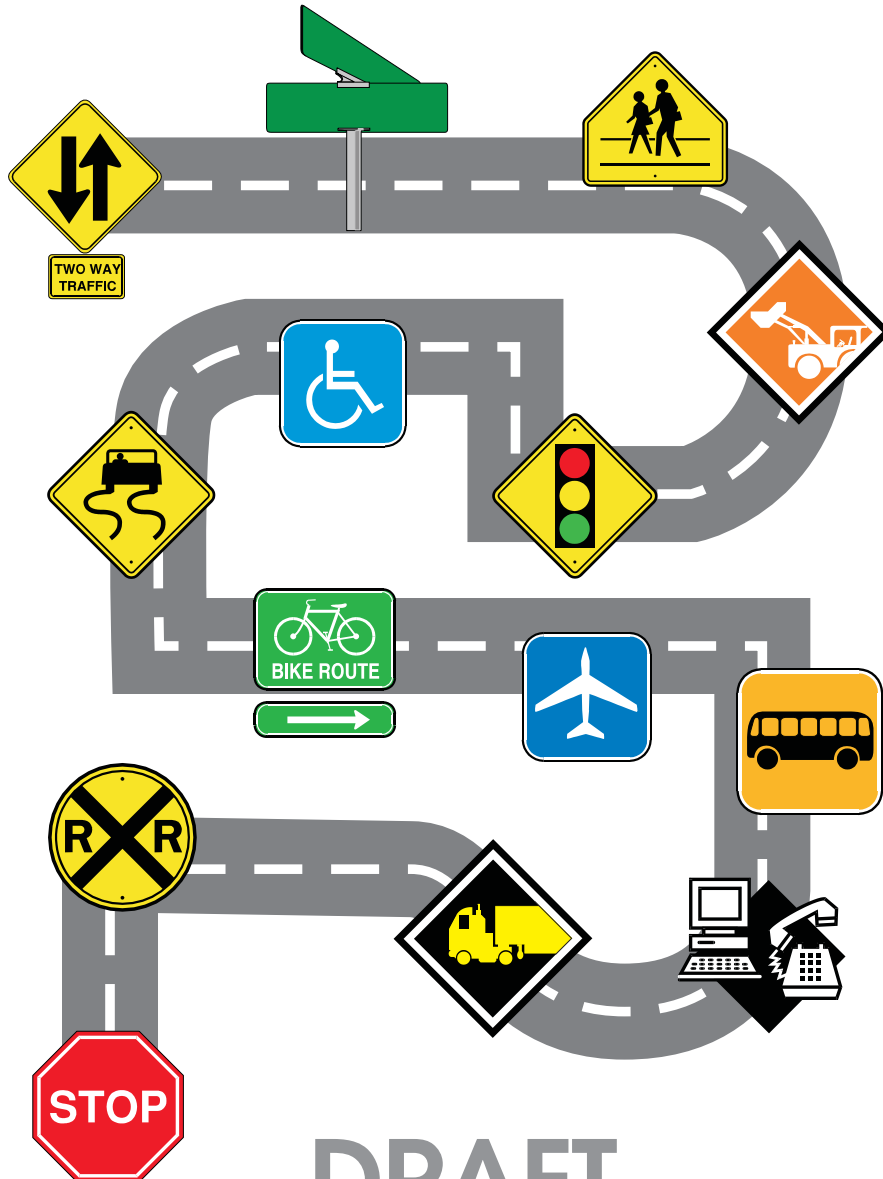


Maricopa Association of Governments

Long Range Transportation Plan

Summary and 1999 Update

Executive Summary - April 1999



MAG LONG RANGE TRANSPORTATION PLAN SUMMARY AND 1999 UPDATE

EXECUTIVE SUMMARY

The Maricopa Association of Governments (MAG) Long Range Transportation Plan (LRTP) addresses all modes of transportation in the region. This Plan is usually updated each year and is based on a 20 year, or longer, time horizon. In this 1999 Update, the time horizon of the Plan is extended from 2017 to 2019. This document summarizes the current status of the Plan and highlights any changes made since approval of the 1997 Plan Update.

OUTLOOK

Over the life of this Plan, resident population in Maricopa County is projected to increase almost 70 percent, while regional travel is projected to increase approximately 80 percent. In response to this growth, the MAG LRTP calls for a considerable expansion of regional transportation facilities. Some of the planned expansions to roadways and transit services include:

- an 89 percent increase in freeway/expressway miles,
- a 56 percent increase in street lane miles,
- a tripling of local bus services,
- a quadrupling of express and commuter bus service, and
- a 39 mile light rail transit system.

Even with these expansions to the regional transportation system, congestion levels are projected to increase. However, average traffic speeds are projected to remain about the same as population growth occurs primarily in outlying areas that currently experience little congestion and planned freeways will be completed throughout the region. Without the planned improvements (No-Build), peak hour speeds are projected to decline and congestion levels per mile of travel are projected to double.

FINANCE

The Transportation Equity Act for the 21st Century requires the MAG LRTP to include a balanced funding plan. The MAG funding plan is based on a trend funding concept, that is, current transportation revenue sources are assumed to continue in the future with periodic adjustments for growth and inflation as needed.

For example, it is assumed that local contributions to transit and street construction will continue in the future. Private contributions to street construction are also projected to continue. Federal funding is projected to continue, but at a declining rate in constant dollar terms. At the State level, it is assumed that there will be periodic adjustments in the gasoline tax rate to keep pace with inflation and more fuel-efficient vehicles, and that a fair share of these funds will be allocated to the MAG region.

Potential “new” funding sources under consideration are actually variations of historic sources needed to maintain a trend level of commitment to meet ongoing regional transportation needs in this high growth area. This 1999 Update of the MAG LRTP recognizes the end of the one-half cent sales tax for freeway in 2005, and includes the equivalent of nearly a one-half cent sales tax for transit.

FREEWAYS/EXPRESSWAYS

The 1999 Update of the LRTP is based on a fair share funding concept in which transportation taxes paid into state and national accounts are largely returned to the region for transportation improvements. Completion dates for new freeways are accelerated and additional improvements to existing regional routes are added to the LRTP. A county-wide map of regional projects is included as Figure EX-1, while specific opening dates for projects to be completed by 2007 are shown in Figure EX-2.

New Freeways. In 1985 voters approved a half-cent sales tax to fund new freeways and expressways in the region. Since 1985, the miles of new freeways in the region have more than doubled and 130 miles remain to be completed. In the 1997 Update of the LRTP, new freeways were to be completed by 2014. This update targets these facilities for completion by the year 2007. This will be largely accomplished with additional bonding.

Existing Freeways. The MAG High Occupancy Vehicle (HOV) Plan provides overall direction for improvements to existing freeways. The highest MAG priorities for Arizona Department of Transportation (ADOT) discretionary funds in the region are completion of HOV lanes on the Black Canyon, Superstition and Squaw Peak, respectively. Longer term concepts include the addition of single occupancy vehicle lanes on the Black Canyon and Superstition, as well as collector/distributor roads between Baseline Road and 16th Street.

Access Routes. Regional access routes into and out of the region are also part of the LRTP. To the northeast much of State Route (SR) 87 is being widened to four lanes. To the northwest, final improvements to complete U.S. 60 as a four-lane facility have been programmed. Improvements to I-10, I-17 and S.R. 85 are part of this LRTP Update.

Plan Additions. The 1999 Update of the Freeway/Expressway element maintains all previously planned facilities and include the following additions:

Agua Fria. The corridor is extended along 99th Avenue from I-10 to MC 85. Expansion of ramp connections to two lanes at I-17 will be studied.

Estrella. This corridor extends from Grand Avenue to MC 85. Within the planning horizon, this corridor is planned as a four-lane controlled-access roadway. Projects in the five-year program include safety improvements, Phase I of a grade separation at Grand Avenue, and an improved connection between Thomas Road and Cotton Lane. Concepts for a connection between Grand Avenue and I-17 are under study.

Grand Avenue. This corridor is upgraded to a controlled-access facility between I-17 and Loop 101. Early grade separations are targeted for completion by 2006. Additional study will occur to identify improvements on Grand between Loop 101 and Loop 303.

I-10. Additional lanes on I-10 between Pecos Road and Riggs Road have been added to this Update and additional capacity increases are under study. Also, the first segment of the collector/distributor system between Baseline Road and 40th Street has been accelerated. I-10 between 7th Avenue and 59th Avenue will soon be widened and further widening between 27th Avenue and the Agua Fria will be studied. Study of the feasibility of additional HOV ramps at the one-half mile will also be undertaken.

I-17. The reconstruction of I-17 between I-10 and Loop 101 has been part of regional plans since 1991. This includes the completion of HOV lanes now under construction and the addition of ninth and tenth lanes south of Thunderbird. This Update adds specific interchange improvements and additional lanes between Loop 101 and the Carefree Highway. Further modifications are the topic of ongoing studies and funding constraints including ninth and tenth lanes between Thunderbird Road and Loop 101 and additional ramp lanes at the I-17/101 interchange. Study of the feasibility of HOV ramps at the one-half mile will also be undertaken.

South Mountain. Completion of the South Mountain Parkway is part of the LRTP. An additional component to the South Mountain in this Update is a truck bypass route which extends south to Riggs Road and east to I-10 from the southwestern section of the South Mountain facility.

SR 85. This Update of the LRTP includes widening of S.R. 85 between I-10 and I-8. Funding for the section in the vicinity of the prison is included in the five-year program and a study of the sequencing of improvements for the length of the corridor will occur.

Superstition. The LRTP includes HOV lanes on the Superstition between I-10 and Loop 202. This Update adds additional general purpose lanes between Price Road and Power Road and interchange improvements are identified.

Wickenburg Bypass. ADOT is in the process of studying bypass routes around the Wickenburg area. The outcome could result in future additions to the regional highway system.

TRANSIT

This Update of the LRTP incorporates significant changes to the planned transit system. In general, this update includes tripling local fixed route bus service to provide mobility throughout the region, tripling dial-a-ride service to meet paratransit transportation needs and a light rail transit system to meet the travel needs of central activity areas.

Since the 1997 Update of the LRTP several studies have been completed which are incorporated into an update of the Long Range Transit Plan. The major elements of the plan are described below:

Fixed Route Bus Service. Fixed route bus service generally follows the mile grid street system of the Phoenix metropolitan area. The revised transit plan calls for nearly a tripling of revenue miles of service with enhanced frequencies in areas with existing service and new service in areas currently unserved. Evening hours are extended and Sunday service is added.

Paratransit Service. Since 1992, the regional plan has supported tripling paratransit service. This plan remains intact with service doubling by 2010 and tripling by 2020.

Express and Commuter Service. This Update quadruples the number of miles of express bus service (Figure EX-3). The planned express service is focused on meeting peak-period demand. Express bus service extends to outlying communities such as Carefree and Cave Creek. Commuter bus service would provide peak period service on weekdays to the communities of Buckeye, Gila Bend and Wickenburg. The system includes nearly 30 park-and-ride lots and five on-line stations are provided which incorporate express bus, local bus, light rail, and shuttle services.

Shuttles/Circulators. Shuttles and neighborhood circulators are used to meet local circulation needs for the light rail system and express bus network, especially in central activity areas.

Light Rail Transit. The light rail transit (LRT) plan includes a 39 mile system (Figure EX-4). A 13-mile segment extending from the vicinity of I-10 and Central Avenue through downtown Tempe and extending to the vicinity of McClintock Drive in Mesa will be the

initial operating segment of the system. Elements of the LRT include provisions for park-and-ride lots and signal prioritization to improve speeds. Shuttle buses and an improved fixed route network also play an important role in the LRT system.

STREETS

Major arterial streets are generally located on the mile grid and carry most of the traffic in the region. The MAG Plan calls for a 56 percent increase in major street lane mileage over the next 20 years. Most of these new lanes are located on the edge of the metropolitan area and are associated with new development. In built-up areas, streets are being widened to the usual standard of five or six through lanes. This Update incorporates the latest information on local street plans and extends the planning horizon to 2019.

AIRPORTS

An update of the MAG Regional Airport System Plan (RASP) was adopted by the MAG Regional Council in December, 1993. An Implementation Study, designed to facilitate carrying out the MAG RASP recommendations, was completed and approved by the MAG Regional Council in December, 1996. The latest projections indicate that air passenger demand at Sky Harbor will nearly double over the next 20 years, while general aviation demand is projected to increase only 30 percent.

The MAG RASP includes 17 airports. Sky Harbor is the commercial service airport and Luke Air Force Base is a major military base. Reliever airports include Chandler, Glendale, Mesa - Falcon Field, Phoenix - Deer Valley and Phoenix - Goodyear. Williams Gateway Airport has been converted from a military base to a civilian airport serving commercial carrying cargo and general aviation. The MAG RASP calls for additional runways at Phoenix Sky Harbor, Phoenix - Goodyear and Glendale. Runway extensions are planned at Buckeye, Glendale, Mesa - Falcon Field and Wickenburg. The Plan recommends that potential sites for a new general aviation airport be investigated for potential implementation beyond twenty years.

BICYCLES

The MAG Bicycle Plan was approved in 1992. Elements of the plan were updated in 1998 to better address emerging issues and needs in bicycling. The MAG Plan identifies a planned regional bikeway system which emphasizes on-street facilities. The Plan includes a bicycle policy statement consisting of four overall goals and numerous objectives. The goals and objectives are designed to provide guidance in planning, designing and implementing a system of internal and regionally connected bikeways that serve the daily travel needs of bicyclists. At the regional level, transportation enhancement funds and Congestion Mitigation and Air Quality Improvement (CMAQ) funds have been applied to bicycle projects, while at the local level, Highway User Revenue Funds (HURF) and general funds are used for bicycle projects.

PEDESTRIAN

The 1993 Update of the MAG LRTP included a pedestrian element. Under the direction of the MAG Pedestrian Working Group, the report, *Pedestrian Area Policy and Design Guidelines*, was completed and included in the 1995 Update of the MAG LRTP. Through the Guidelines, MAG has actively promoted the integration of pedestrian facilities into transportation projects to encourage walking, as well as to better integrate pedestrian and land use facilities and improve the quality of pedestrian facilities along streets.

DEMAND AND SYSTEM MANAGEMENT

Transportation Demand Management (TDM) programs and Transportation System Management (TSM) improvements are integral parts of the MAG LRTP with specific projects designated for funding in the MAG five-year program. Ongoing TDM efforts include telecommuting, rideshare, and vanpool programs. Ongoing TSM efforts include projects to improve traffic signals and expand the freeway management system, as well as improvements to intersections and interchanges. Intelligent Transportation System (ITS) projects are becoming increasingly important in regional transportation planning efforts. In 1996 MAG approved an ITS Strategic Plan for the region and established an ITS committee. The ITS Committee anticipates updating the Strategic Plan over the coming year.

Figure EX-1: Regional Highway System

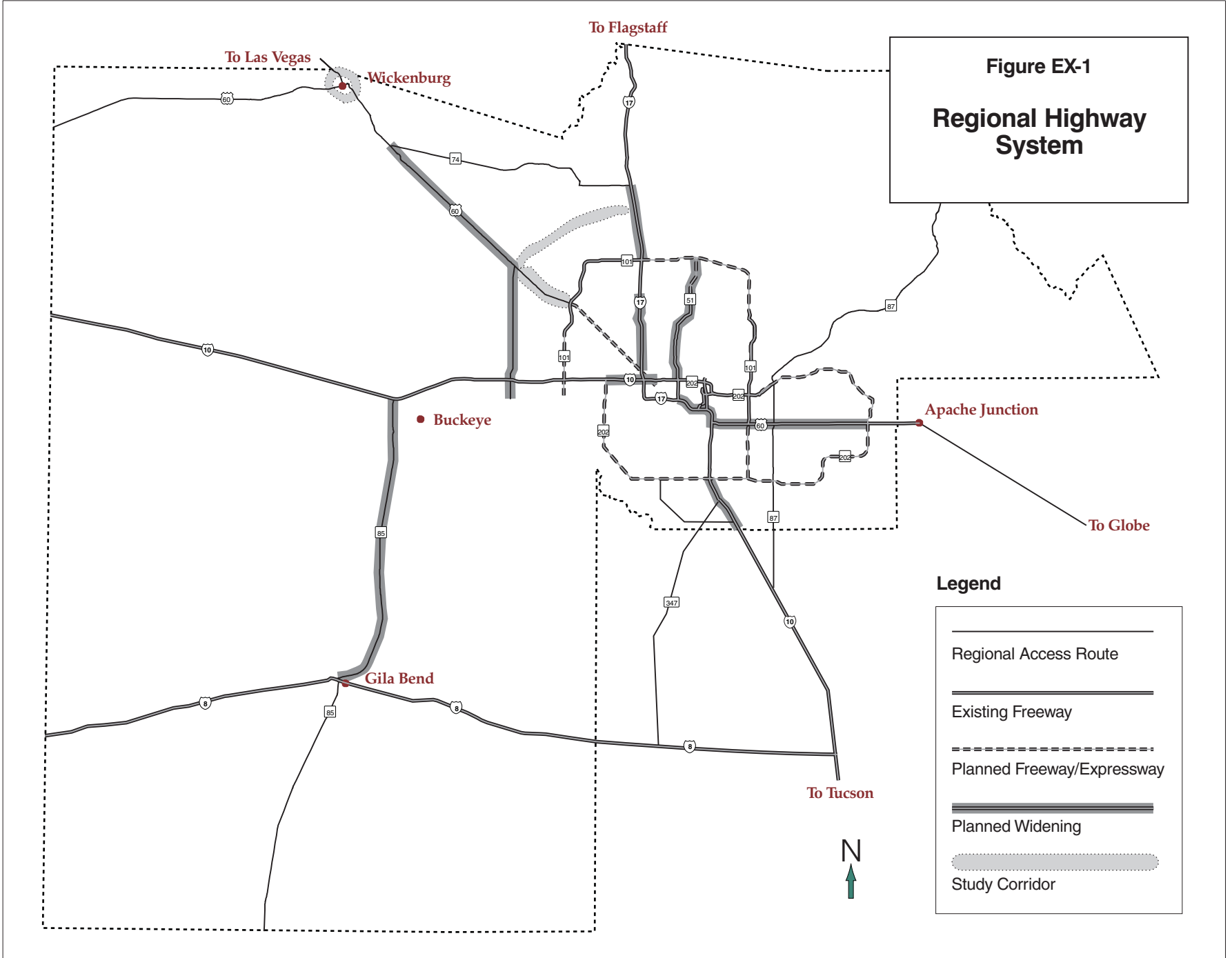


Figure EX-2: Freeway/Expressway Completions by 2007

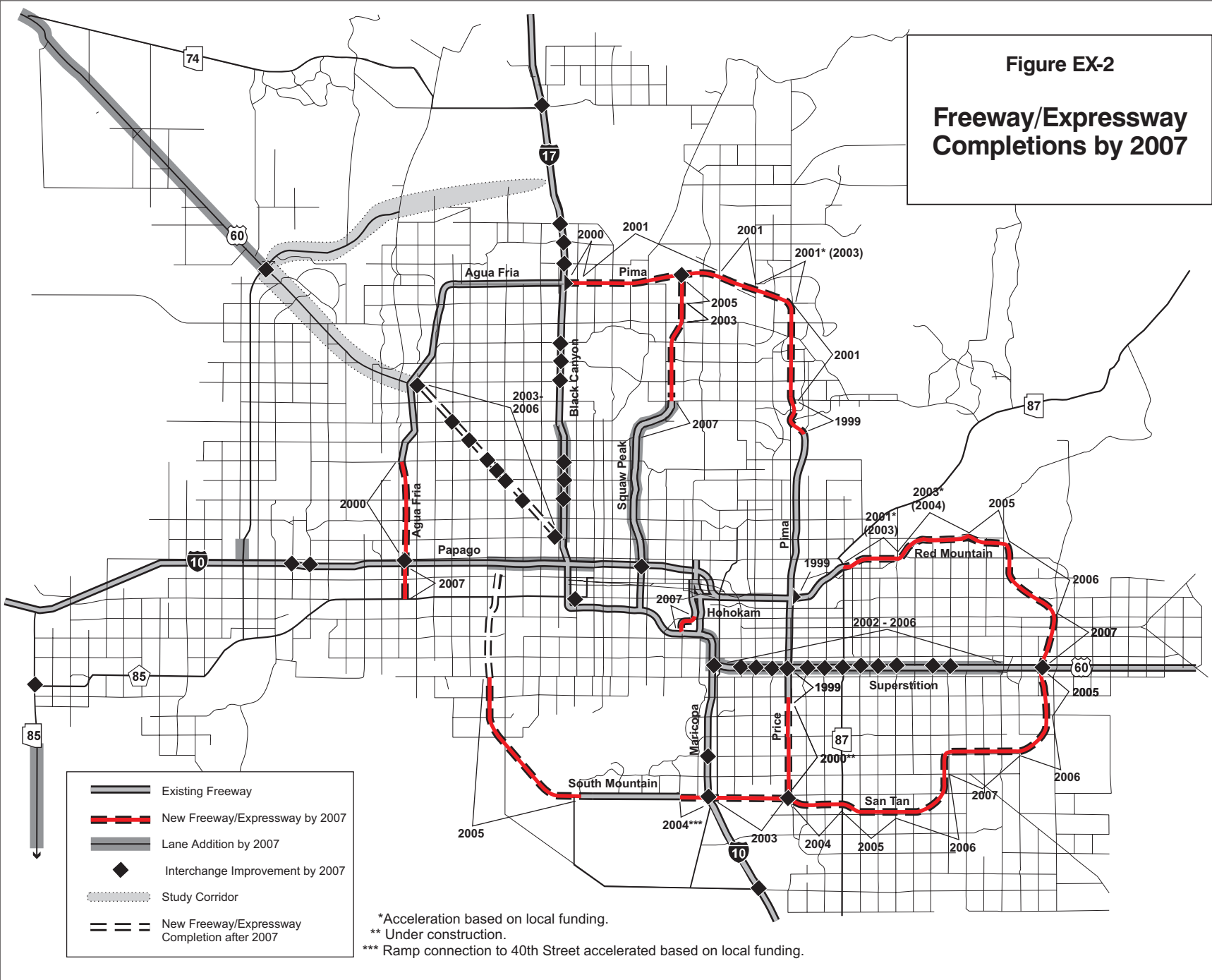




Figure EX-4: Light Rail Service

